



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,221	10/29/2001	Ouri Wolfson	01-1626	2901

7590

03/18/2003

Brian R. Harris  
McDonnell Boehnen Hulbert & Berghoff  
32nd Floor  
300 S. Wacker Drive  
Chicago, IL 60606

EXAMINER

NGUYEN, TAN QUANG

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/040,221

Applicant(s)

WOLFSON, OURI

Examiner

TAN Q NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAIL ACTION

### *Notice to Applicant(s)*

1. This application has been examined. Claims 1-54 are pending.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
3. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step is the step of predicting future locations of a moving object. Furthermore, it is unclear as to the difference between "a path between the current location and the destination" and "a trajectory for the moving object" on lines 5 and 6, respectively. Verification is requested.
5. As per claim 18, the step "simplifying the path to create a first trajectory" is unclear as to there is no indication of how to simplify the path. Clarification is needed. Furthermore, in claim 21 recites that the step of simplifying the path to create an estimated trajectory and wherein the trajectory is a complication of line segments connecting the first location and the destination. Is "an estimated trajectory" in claim 21 the same as "a first trajectory" in claim 18? And the complicated trajectory recited in claim 21 refers to which one, the first trajectory or the estimated trajectory. Clarification is needed.
6. As per claim 22, the phrase "the database" on line 3 has no antecedent basis.

7. Claim 29 (as exemplary of claims 29 and 38) is also rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step is what happen next when the step of calculating a difference between the anticipated location and the second location is performed in order to complete the method of creating and updating trajectory of a moving device.

8. The remaining claims, not specifically mentioned, are rejected for incorporating the defects from their respective parent claims by dependency.

9. The following rejections are based on the examiner's best interpretation of the claims in light of the 35 U.S.C. 112 errors noted above.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-6 and 9-44 and 46-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ra (6,317,686).

12. With respect to claims 1, 2, 11, 12, 15, Ran discloses a method and apparatus for generating the itinerary for the moving object which includes the steps of receiving a current location (see figure 11, item 118 or 113), obtaining a destination of the moving object (see figure 10A, item 102), computing a path between the current location and

the destination (see figure 11, at least item 1111) and constructing a trajectory for the moving object (see figure 11, item 118 or 1114).

13. Ran does not explicitly disclose the predicting future locations of a moving object. However, such itinerary can be used as the predicted future locations since it lays out the all the detail of the recommendations on routing and itinerary for the trip from current location to destination as shown in at least figure 11, item 1114 of the Ran reference. It would have been obvious that the predicting future locations of the moving object are known based on the calculated route.

14. With respect to claims 3 and 4, the itinerary and the map are sent to the moving object (see at least figures 10B and 11).

15. With respect to claim 5, such limitation is disclosed in at least the abstract and figure 10B.

16. With respect to claim 6, the steps for updating the itinerary based on the updated current location are shown in at least figure 11, item 1112 of the Ran reference.

17. With respect to claim 9 and 10, Ran also disclose that user has the option of choosing the desired route selection based on the shortest distance or a fastest travel time (see at least figure 10B, item 103).

18. With respect to claims 13 and 14, Ran further disclose that the system takes the traffic update into account for calculating the itinerary (see at least figures 6, 9 and 11).

19. With respect to claim 16, Ran discloses that GPS can be used to identify the current location of the moving object (see at least column 24, lines 14-16).

20. With respect to claim 17, Ran discloses that the moving object is a cell phone (see figure1, item 14).

21. With respect to claims 18, 20 and 21, Ran does disclose that the itinerary is calculated based on the travel speed, predicted travel speed and its direction (see at

least the abstract, figures 3, 6, and 8). It would have been obvious to one of ordinary skill in the art to obtain the itinerary which is a plurality of line segments connecting the first location and the destination that are falls into the desired user selection.

22. With respect to claims 19 and 22-28, the limitations of these claims have been noted in the rejections above. They are therefore considered rejected as set forth above.

23. With respect to claim 43, Ran does not explicitly disclose the step of obtaining orientation of the moving object for computing a trajectory of the moving object. However, Ran does suggest the step of entering the destination of the moving as shown in at least figure 10A which also includes the orientation of the moving object based on the current location and the destination. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Ran by also allow the user to enter the orientation as his/her destination for calculating the recommended trip.

24. With respect to claims 44 and 46-49, the limitations of these claims have been noted in the rejections above. They are therefore considered rejected as set forth above.

25. With respect to claim 50, Ran disclose the claimed invention as discussed above except for the trajectory server. However, Ran does disclose means for generating an itinerary for the user based on the desired selection as shown in at least figures 8 and 11. It would have been obvious to one of ordinary skill in the art to realized that the Ran system should have a server to deliver the itinerary to the user upon request.

26. With respect to claims 51-54, the limitations of these claims have been noted in the rejections above and in the Ran reference in at least figure 1. They are therefore considered rejected as set forth above.

27. Claims 7, 8, 29-42 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ran as applied to claims above, and further in view of Tanimoto (5,911,775).

28. With respect to claims 7, 8, 29, 31, 38 and 45, Ran et al. discloses the claimed invention as discussed above except that the step of recomputing the path is when an error reaches a threshold. However, Tanimoto suggest a vehicle navigation system which provide the calculated optimum route from the current position and destination position and further provide the recalculated route when the vehicle is off route, i.e when the position of the current vehicle is off the calculated optimum route by a threshold (see at least figure 1 and the related text). It would have been obvious to one of ordinary skill in the art to incorporate the teaching of Tanimoto into the system of Ran et al. in order to provide the system with the enhanced capability of updating the itinerary when the moving object went off route in order to quickly guide the moving object toward the destination.

29. With respect to claims 30, 32-37 and 39-42, the limitations of these claims have been noted in the rejections above and in the Ran reference. They are therefore considered rejected as set forth above.

### ***Conclusion***

30. All claims are rejected.

31. The following references are cited as being of general interest: Lefebvre (5,243,528), Meakawa et al. (6,034,626), Yagyu et al. (6,067,499), Ito et al. (6,249,740), Ito et al. (6,314,369), Machii et al. (6,324,467), Sugiyama et al. (6,339,746) and Ito (6,347,278).

Art Unit: 3661

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Nguyen, whose telephone number is (703) 305-9755. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

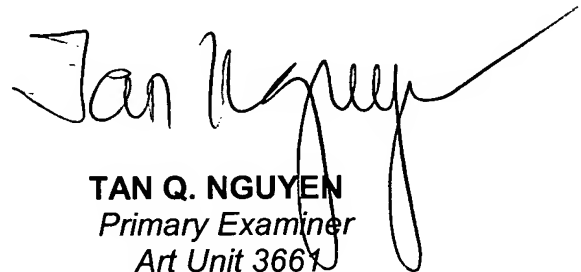
or faxed to:

(703) 305-7687, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park V, 2451 Crystal Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

/tqn  
March 7, 2003

  
**TAN Q. NGUYEN**  
*Primary Examiner*  
Art Unit 3661